

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims

1. (Previously presented). An isolated polypeptide comprising a suppressor of cytokine signaling (SOCS) sequence and a membrane translocating sequence at either a 5' or 3' end of the SOCS sequence.
2. (Previously presented). The isolated polypeptide of claim 1, wherein the isolated polypeptide is a human polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3).
3. (Previously presented). An isolated nucleic acid encoding a polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence at either a 5' or 3' end of the SOCS sequence.
4. (Previously presented). The isolated nucleic acid of claim 3, wherein the isolated nucleic acid encodes a human suppressor of cytokine signaling (SOCS) amino acid sequence and the membrane translocating sequence set forth as SEQ ID NO: 2 at either 5' or 3' of the SOCS sequence.
5. (Currently amended). The isolated nucleic acid of claim 4, wherein the isolated nucleic acid comprises a human SOCS3 nucleotide sequence set forth in SEQ ID NO: 11.

6. (Currently amended). A vector comprising an isolated mammalian nucleic acid encoding a polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating at either ~~5' or 3'~~ amino or carboxy end of the SOCS sequence.
7. (Currently amended). An isolated [[A]] cell comprising a vector, wherein the vector ~~comprises comprising~~ an isolated human nucleic acid encoding a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence set forth as SEQ ID NO: 2, producing a recombinant cell-penetrating form of SOCS1 and of SOCS3.
8. (Previously presented). The isolated polypeptide of claim 1, wherein the membrane translocating sequence comprises SEQ ID NO: 2.
9. (Original). The polypeptide of claim 1, wherein the polypeptide further comprises a purification sequence.
10. (Previously presented). The polypeptide of claim 9, wherein the purification sequence is a polyhistidine tag.
11. (Original). A pharmaceutical composition comprising the polypeptide of claim 1, and a pharmaceutically acceptable carrier, diluent or excipient.
12. (Currently amended). A method of ~~preventing or~~ treating an inflammatory disease in a subject, comprising:
administering a polypeptide comprising a suppressor of cytokine signaling 1 or 3 (SOCS1; SOCS3) sequence and a membrane translocating sequence at either amino or carboxy terminal end of the SOCS sequence ~~of claim 1~~ to a subject.

13. (Previously presented). The method of claim 12, wherein the subject is a subject with an inflammatory disease or at risk for presenting with an inflammatory disease.
14. (Previously presented). The method of claim 13, wherein the severity of the inflammatory disease of the subject is reduced.
15. (Withdrawn-previously presented). The method of claim 14, wherein the severity of an inflammatory process in obesity, insulin resistance, type 2 diabetes, and metabolic syndrome is reduced.
16. (Original). The method of claim 13, wherein the inflammation is associated with an infection.
17. (Original). The method of claim 16, wherein the infection is a viral infection.
18. (Original). The method of claim 16, wherein the infection is a bacterial infection.
19. (Withdrawn-previously presented). The method of claim 18, wherein the bacterial infection is a *Staphylococcus aureus* enterotoxin B infection.
20. (Canceled).
21. (Original). The method of claim 12, wherein the polypeptide is administered to the subject prior to or after surgery.
22. (Original). The method of claim 12, wherein the polypeptide is administered to the subject prior to or after contact with an infectious biological weapon.

23. (Currently amended). A method of ~~preventing or~~ treating an inflammatory disease in a patient comprising administering an isolated polypeptide comprising a cell penetrating suppressor of cytokine signaling 1 or 3 (CP-SOCS1; CP-SOCS3) polypeptide to a patient.
24. (Previously presented). The method of claim 23, wherein the patient is presenting with an inflammatory disease or at risk for presenting with an inflammatory disease.
25. (Previously presented). The method of claim 23, wherein the severity of the patient with an inflammatory disease is reduced.
26. (Withdrawn- previously presented). The method of claim 25, wherein the severity of inflammatory process in obesity, insulin resistance, type 2 diabetes, and metabolic syndrome is reduced.
27. (Original). A method of inhibiting a cytokine-induced response in a cell, comprising administering to the cell a complex comprising the polypeptide of claim 1.
28. (Original). A method of inhibiting a cytokine-induced response in a subject, comprising administering to the subject a complex comprising the polypeptide of claim 1.
29. (Withdrawn). A method comprising administering to a subject polypeptide comprising a mutated SOCS sequence, wherein the mutated SOCS sequence lacks or has a reduced suppressor of cytokine signaling function.
30. (Withdrawn- previously presented). The method of claim 29, wherein the polypeptide further comprises a membrane translocating sequence.

31. (Withdrawn). The method of claim 30, wherein the polypeptide further comprises a purification sequence.